

AMENDED IN SENATE APRIL 25, 2016

AMENDED IN SENATE APRIL 7, 2016

AMENDED IN SENATE MARCH 30, 2016

SENATE BILL

No. 1043

Introduced by Senator Allen

(Principal coauthor: Assembly Member Williams)

February 12, 2016

An act to amend Section 25420 of, and to add Section 39735 to, the Health and Safety Code, ~~and to amend Section 40106 of the Public Resources Code,~~ relating to biogas.

LEGISLATIVE COUNSEL'S DIGEST

SB 1043, as amended, Allen. ~~Renewable gas: biogas~~ *Biogas* and biomethane.

(1) The California Global Warming Solutions Act of 2006 establishes the State Air Resources Board as the state agency responsible for monitoring and regulating sources emitting greenhouse gases. The act requires the state board to adopt regulations to require the reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with this program. The act requires the state board to adopt a statewide greenhouse gas emissions limit, as defined, to be achieved by 2020 equivalent to the statewide greenhouse gas emissions level in 1990. Existing law requires the state board to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants, as defined, in the state.

This bill would require the state board to consider and, as appropriate, adopt policies to significantly increase the sustainable production and use of ~~renewable gas, biogas~~, as defined, and, in so doing, would require

the state board, among other things, to ensure the production and use of ~~renewable gas~~ *biogas* provides direct environmental benefits and identify barriers to the rapid development and use of ~~renewable gas~~ *biogas* and potential sources of funding. The bill would require the state board to develop and adopt a life-cycle accounting method for greenhouse ~~gas~~ *gases* and emissions of short-lived climate pollutants associated with biogas produced from forest biomass, as specified.

(2) Existing law requires the Office of Environmental Health Hazard Assessment, in consultation with the state board, the Department of Toxic Substances Control, the Department of Resources Recycling and Recovery, and the California Environmental Protection Agency, to compile a list of constituents of concern that could pose risks to human health and that are found in biogas, as defined, at concentrations that significantly exceed the concentrations of those constituents in natural gas. Existing law requires the office to determine the health protective levels for that list, as specified, and requires the state board to identify realistic exposure scenarios and the health risks associated with those scenarios, as specified.

Existing law requires the Public Utilities Commission to adopt, by rule or order, standards for biomethane, as defined, that specify the concentrations of constituents of concern that are reasonably necessary to protect public health and ensure pipeline integrity and safety, as specified, and requirements for monitoring, testing, reporting, and recordkeeping, as specified. Existing law requires a gas corporation to comply with those standards and requirements and requires the commission to require gas corporation tariffs to condition access to common carrier pipelines on the applicable customer meeting those standards and requirements.

This bill would revise the definitions of biogas and biomethane for these purposes.

~~(3) The California Integrated Waste Management Act of 1989, which is administered by the Department of Resources Recycling and Recovery, requires each city, county, and regional agency, if any, to develop a source reduction and recycling element of an integrated waste management plan. With certain exceptions, the source reduction and recycling element of that plan is required to divert 50% of all solid waste, through source reduction, recycling, and composting activities. Existing law allows the 50% diversion requirement to include not more than 10% through transformation or “biomass conversion,” as defined, if specified conditions are met. Existing law defines “biomass~~

conversion” for purposes of the waste management laws to mean the production of heat, fuels, or electricity by the controlled combustion of, or the use of other noncombustion thermal conversion technologies on, certain listed materials.

This bill would revise that definition to add to those listed materials byproducts or residue from composting.

Existing law specifies that “biomass conversion” does not include the controlled combustion of recyclable pulp or recyclable paper materials, or materials that contain sewage sludge, industrial sludge, medical waste, hazardous waste, or either high-level or low-level radioactive waste.

This bill would delete from that exclusion the controlled combustion of materials that contain sewage sludge.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

- 1 SECTION 1. The Legislature finds and declares all of the
- 2 following:
- 3 (a) California has enacted numerous policies to reduce emissions
- 4 of greenhouse gases and to increase the use of renewable energy
- 5 resources and renewable fuels, including the California Global
- 6 Warming Solutions Act of 2006 (Division 25.5 (commencing with
- 7 Section 38500) of the Health and Safety Code), the California
- 8 Renewables Portfolio Standard Program (Article 16 (commencing
- 9 with Section 399.11) of Chapter 2.3 of Part 1 of Division 1 of the
- 10 Public Utilities Code), the Low Carbon Fuel Standard regulation
- 11 (Executive Order S-01-07 (January 19, 2007), Sections 95480 to
- 12 95490, inclusive, of Title 17 of the California Code of Regulations),
- 13 an energy storage portfolio requirement (Chapter 469 of the
- 14 Statutes of 2010), emissions goals for 2030 and 2050 (Executive
- 15 Order B-30-15), and the state’s comprehensive strategy to reduce
- 16 emissions of short-lived climate pollutants (Section 39730 of the
- 17 Health and Safety Code).
- 18 (b) Natural gas, which is used for a wide variety of purposes,
- 19 including the generation of electricity, heating, cooling, *and*
- 20 industrial, commercial, residential, and transportation ~~fuel~~, *fuels*,
- 21 causes more than one-quarter of all emissions of greenhouse gases
- 22 in California. Methane emissions from a variety of sources,

1 including wastewater treatment facilities, landfills, dairies,
2 agricultural production, and oil and gas, represent up to 15 percent
3 of California's total climate change emissions. Wildfires cause
4 two-thirds of all black carbon emissions, which accounts for
5 approximately 10 percent of California's total climate change
6 emissions.

7 (c) Reducing emissions of methane, black carbon, and other
8 short-lived climate pollutants is the most effective way to
9 immediately slow global warming and reduce the impacts of
10 climate change. Capturing and using methane-~~(renewable gas)~~ *(the*
11 *primary chemical component of biogas)* can significantly reduce
12 emissions of greenhouse gases from fossil fuel use, organic waste,
13 and petroleum-based fertilizers. Increasing the production and use
14 of ~~renewable gas~~ *biogas* could reduce emissions of greenhouse
15 gases by tens of millions of metric tons of carbon dioxide
16 equivalent emissions per year.

17 (d) ~~Renewable gas~~ *Biogas* generated from organic waste can
18 be used to produce the lowest carbon transportation fuel. It can
19 also be used to produce flexible generation renewable power,
20 energy storage, and a low-carbon gas supply for heating, cooling,
21 and other purposes.

22 (e) Using forest biomass collected as part of a sustainable
23 forestry plan can significantly reduce the risks and impacts of
24 catastrophic wildfires, including black carbon emissions and air
25 pollution, impacts on water supply and quality, impacts on utility
26 and other infrastructure, threats to public safety and communities,
27 impacts on fisheries and wildlife, and effects on precipitation.

28 (f) Increasing the use of ~~renewable gas~~ *biogas* in heavy-duty
29 vehicles in California can help protect disadvantaged communities
30 in the state by reducing toxic air contaminants and smog-forming
31 emissions.

32 (g) ~~Renewable gas~~ *Biogas* can provide significant economic
33 benefits to California, including job creation, an instate source of
34 gas, increased energy security, revenue and energy for public
35 agencies, and revenue for dairies, farms, rural forest communities,
36 and other areas.

37 (h) Increasing the use of ~~renewable gas~~ *biogas* will diversify
38 and decarbonize California's gas supply.

39 (i) Increasing the use of ~~renewable gas~~ *biogas* can help
40 California to meet the waste diversion requirements of Section

1 41781.3, Article 1 (commencing with Section 41780) of Chapter
2 6 of Part 2 of, and Chapter 12.9 (commencing with Section
3 42649.8) of Part 3 of, Division 30 of, the Public Resources Code,
4 and *the goals of* the Short-Lived Climate Pollutant Reduction
5 Strategy being developed by the State Air Resources Board
6 pursuant to Section 39730 of the Health and Safety Code by using
7 diverted organic waste to produce ~~renewable gas~~; *biogas*.

8 SEC. 2. Section 25420 of the Health and Safety Code is
9 amended to read:

10 25420. For purposes of this chapter, the following definitions
11 apply:

12 (a) “Biogas” means gas that is produced from organic waste
13 through anaerobic digestion or eligible *noncombustion thermal*
14 conversion technologies, consistent with Section 40106 of the
15 Public Resources Code.

16 (b) “Biomethane” means the methane derived from biogas.

17 (c) “Board” means the State Air Resources Board.

18 (d) “CalRecycle” means the Department of Resources Recycling
19 and Recovery.

20 (e) “Commission” means the Public Utilities Commission.

21 (f) “Common carrier pipeline” means a gas conveyance pipeline
22 located in California that is owned or operated by a utility or gas
23 corporation, excluding a dedicated pipeline.

24 (g) “Dedicated pipeline” means a conveyance of biogas or
25 biomethane that is not part of a common carrier pipeline system
26 and that conveys biogas from a biogas producer to a conditioning
27 facility or an electrical generation facility.

28 (h) “Department” means the Department of Toxic Substances
29 Control.

30 (i) “Gas corporation” has the same meaning as defined in Section
31 222 of the Public Utilities Code and is subject to rate regulation
32 by the commission.

33 (j) “Hazardous waste landfill” means a landfill that is a
34 hazardous waste facility, as defined in Section 25117.1.

35 (k) “Office” means the Office of Environmental Health Hazard
36 Assessment.

37 (l) “Organic waste” means waste of biological origins, including
38 organic waste, as defined in Section 42649.8 of the Public
39 Resources Code; biomass feedstock, consistent with Section 40106
40 of the Public Resources Code; and livestock waste.

(m) “Person” means an individual, trust, firm, joint stock company, partnership, association, business concern, limited liability company, or corporation. “Person” also includes any city, county, district, and the state or any department or agency thereof, or the federal government or any department or agency thereof to the extent permitted by law.

SEC. 3. Section 39735 is added to the Health and Safety Code, to read:

39735. (a) For purposes of this section, the following terms have the following meanings:

(1) “Biogas” has the same meaning as defined in Section 25420, except that it does not include gas produced from forest biomass unless it is produced from forest waste remaining after all other reasonable forest products have been produced and it meets one or more of the following conditions:

(A) The waste was generated pursuant to the Governor’s state of emergency proclamation issued on October 30, 2015.

(B) The waste was generated as a result of activities necessary to clear defensible space within 300 feet of a legally permitted structure.

(C) The waste was produced pursuant to an approved timber harvest plan, nonindustrial timber management plan, or working forest management plan that will increase the average stand diameter of residual crop trees, and the biogas produced from the waste will provide long-term reductions in greenhouse gas and emissions of short-lived climate pollutants pursuant to the life-cycle accounting method specified in subdivision (c).

(D) The waste was generated from fuel reduction or ecological forest restoration thinning activities on national forest land that increase stand heterogeneity, create openings of less than one acre, and increase the average stand diameter of residual trees.

~~(2) “Renewable gas” means biogas or synthetic gas generated by an eligible renewable energy resource meeting the requirements of the California Renewables Portfolio Standard Program (Article 16 (commencing with Section 399.11) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code). For purposes of this paragraph, “eligible renewable energy resource” does not include organic waste, as defined in subdivision (f) of Section 25420.~~

~~(3)~~

1 (2) “Short-lived climate pollutant” has the same meaning as
2 defined in Section 39730.

3 (b) In order to meet the state’s climate change, low-carbon fuel,
4 renewable energy, landfill diversion, and wildfire reduction goals,
5 the state board shall consider and, as appropriate, adopt policies
6 to significantly increase the sustainable production and use of
7 ~~renewable gas~~ *biogas*. In doing so, the state board shall do all the
8 following:

9 (1) Ensure that any policy is coordinated and consistent with
10 existing state policies to accomplish the following:

11 (A) Promote renewable fuels and eligible renewable energy
12 resources, as defined in the California Renewables Portfolio
13 Standard Program (Article 16 (commencing with Section 399.11)
14 of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code).

15 (B) Reduce life-cycle emissions of greenhouse gases and
16 short-lived climate pollutants and increase carbon sequestration.

17 (C) Divert organic waste from landfills, consistent with Section
18 39730 and other state policies.

19 (D) Reduce air and water pollution.

20 (E) Reduce wildfires.

21 (F) Promote resilient and sustainable forests.

22 (G) Protect the environmental quality of natural and working
23 lands through sustainable cultivation, use, and application of
24 biological materials.

25 (2) *Ensure that any adopted biogas policy is protective of public*
26 *health and safety.*

27 ~~(2)~~

28 (3) Ensure, in consultation with the Department of Resources
29 Recycling and Recovery, that any policy recognizes that the amount
30 of landfill gas will decline in the future due to increased organic
31 waste diversion to meet the targets of the state board’s strategy to
32 reduce emissions of short-lived climate pollutants and other state
33 organic waste reduction efforts.

34 ~~(3)~~

35 (4) Ensure that the production and use of ~~renewable gas~~ *biogas*
36 provides direct benefits to the state’s environment by avoiding or
37 reducing the emission of criteria pollutants, avoiding or reducing
38 emissions of short-lived climate pollutants and greenhouse gases
39 within the state, avoiding or reducing emissions that adversely
40 affect the waters of the state, avoiding or reducing nuisances

1 associated with the emission of odors, or helping the state to meet
2 its landfill diversion requirements.

3 ~~(4)~~

4 (5) Identify barriers to the rapid development and use of
5 ~~renewable gas~~ *biogas* and make specific recommendations to
6 remove those barriers.

7 ~~(5)~~

8 (6) Coordinate with the Public Utilities Commission, the State
9 Energy Resources Conservation and Development Commission,
10 publicly owned utilities, the Department of Resources Recycling
11 and Recovery, and the Department of Forestry and Fire Protection.

12 ~~(6)~~

13 (7) Identify potential sources of funding to provide incentives
14 for ~~renewable gas~~ *biogas* production and use.

15 (c) The state board shall develop and adopt a life-cycle
16 accounting method for greenhouse gas and emissions of short-lived
17 climate pollutants associated with biogas produced from forest
18 biomass that meets the requirements specified in paragraph (1) of
19 subdivision (a). The method shall include upstream accounting of
20 forest carbon and shall avoid double counting of emission
21 reductions.

22 (d) Nothing in this section is intended to affect standards adopted
23 pursuant to Section 25421 before January 1, 2016, for biomethane
24 that is to be injected into a common carrier pipeline.

25 ~~SEC. 4. Section 40106 of the Public Resources Code is~~
26 ~~amended to read:~~

27 ~~40106. (a) “Biomass conversion” means the production of~~
28 ~~heat, fuels, or electricity by the controlled combustion of, or the~~
29 ~~use of other noncombustion thermal conversion technologies on,~~
30 ~~the following materials, when separated from other solid waste:~~

31 ~~(1) Agricultural crop residues.~~

32 ~~(2) Bark, lawn, yard, and garden clippings.~~

33 ~~(3) Leaves, silvicultural residue, and tree and brush pruning.~~

34 ~~(4) Wood, wood chips, and wood waste.~~

35 ~~(5) Nonrecyclable pulp or nonrecyclable paper materials.~~

36 ~~(6) Byproducts or residue from composting.~~

37 ~~(b) “Biomass conversion” does not include the controlled~~
38 ~~combustion of recyclable pulp or recyclable paper materials, or~~
39 ~~materials that contain industrial sludge, medical waste, hazardous~~
40 ~~waste, or either high-level or low-level radioactive waste.~~

1 ~~(e) For purposes of this section, “nonrecyclable pulp or~~
2 ~~nonrecyclable paper materials” means either of the following, as~~
3 ~~determined by the department:~~

4 ~~(1) Paper products or fibrous materials that cannot be~~
5 ~~technically, feasibly, or legally recycled because of the manner in~~
6 ~~which the product or material has been manufactured, treated,~~
7 ~~coated, or constructed.~~

8 ~~(2) Paper products or fibrous materials that have become soiled~~
9 ~~or contaminated and as a result cannot be technically, feasibly, or~~
10 ~~legally recycled.~~